

5401  
EA-04-12  
*Aster vialis*

May 5, 2004

Concerned Citizen,

The Upper Willamette Resource Area of the Eugene District Bureau of Land Management has completed the Environmental Assessment (EA) and Finding of No Significant (FONSI) for the proposed *Aster Vialis* habitat enhancement project located in Section 1, T. 18 S., R. 2 W.; Section 15, T. 19 S., R. 2 W.; Section 5, T. 17 S., R. 2 W. and Section 28, T. 14 S., R. 2 W., Will. Mer.

You have expressed an interest in receiving copies of Environmental Assessments for district projects. Enclosed is a copy of the Environmental Assessment for your review and any comments. Public notice of this proposed action will be published in the Eugene Register Guard on May 5, 2004. The EA will also be available on the internet at <http://www.edo.or.blm.gov/planning>. The public comment period will end on June 4, 2004. Please submit comments to me at the district office, by mail or by e-mail at [OR090mb@or.blm.gov](mailto:OR090mb@or.blm.gov) by close of business (4:15 p.m.) on or prior to June 4, 2004. If you have any questions concerning this proposal, please feel free to call Cheshire Mayrsohn at 683-6407.

Comments, including names and street addresses of respondents, will be available for public review at the district office, 2890 Chad Drive, Eugene, Oregon during regular business hours (7:45 a.m. to 4:15 p.m.), Monday through Friday, except holidays, and may be published as part of the EA or other related documents. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

Sincerely,

Emily Rice, Field Manager  
Upper Willamette Resource Area

Enclosure

*Aster vialis* Habitat Enhancement  
Upper Willamette Resource Area  
BLM Eugene District  
Environmental Assessment  
OR090-04-12

## 1.0 PURPOSE AND NEED FOR ACTION

The Bureau of Land Management (BLM) proposes to improve habitat at four *Aster vialis* sites in the Upper Willamette Resource Area of the Eugene District. *Aster vialis* is a Bureau Sensitive Plant Species. Presently, the management of *Aster vialis* populations has been to protect the sites from direct disturbance by having a no-entry reserve around each population. This protects the sites from human disturbance, but has created stand conditions that are too dark for Aster.

The need for this project is established in the Eugene District Resource Management Plan (RMP), which gives management direction for Special Status Species. The RMP states, “implement silvicultural treatments through active management to maintain or enhance special status plant populations” (p. 55). In addition, specific Management Recommendations (MRs) have been developed for *Aster vialis* as part of the Survey and Manage program described in the RMP (p.22). They recommend that actions be taken to: 1) create gaps and edge habitat through fine scale disturbances, 2) open up forest canopy to 50-75 percent, 3) control competing understory vegetation, 4) periodically reduce duff layers in and around individuals to allow for seedling germination and establishment, 5) control noxious and exotic weeds using integrated noxious weed management.

The purpose of this project is to improve *Aster vialis* habitat by:

- Opening the canopy.
- Removing invasive plants and competing vegetation.
- Creating seedbed, with the objective of producing Aster populations with large flowering plants and seedlings.

### 1.1 Conformance

The Proposed Action is in conformance with the *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl*, April 1994 (NSO ROD), and the RMP as amended by the *Record of Decision Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl* (March 2004), and *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (March 2004). These documents are available at the Eugene District Office of the BLM, Eugene, Oregon or on the internet at <http://www.or.blm/nwfp.htm>.

## 1.2 Issues

Issue 1: How would road building activities affect soils and non-native plants?

Issue 2: How would the action alternatives affect *Aster vialis* habitat?

## 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

### 2.1 Alternative 1: No Action

Under this alternative there would be no treatments to any of the *Aster vialis* sites. Forest canopies around Aster populations would continue to close creating conditions too dark for Aster to flourish. Populations of Aster would continue to decline and may be ultimately lost. Weeds could still be treated under an existing Categorical Exclusion (CE).

### 2.2 Alternative 2: Treatment from Existing Roads

This alternative proposes to treat a total of 11 acres (see Figure 1). Treatments would open the canopy to 50 to 75% by removing overstory trees, cutting brush and removing saplings. Trees to be removed would be less than 24" in diameter. From 40 to 120 trees per acre would be felled or removed. Removal of the boles would be done using existing roads and skid roads. Felled trees would be limbed. Resulting slash would be hand piled and burned resulting in approximately 7 tons pre acre of fine fuels (less than 3' in diameter). Areas of bare ground for seedling establishment would be created by piling and burning brush, limbs, saplings and debris left after overstory reduction. Brush would be cut to open the canopy. Weeds (blackberry, false brome, English ivy, and Scotch broom) would be hand pulled and mulched prior to the action. Maintenance weeding would be done after the action to prevent weeds from taking over the project areas. At RFI #9, trees would be felled and limbed (not removed) to reduce disturbance to the ACEC.

Snags and down logs would be created in the proposed project areas. Live trees selected for snag and down log creation would vary in size and tree species (< 24" dbh). Chainsaw topping and girdling would be used to make two to five snags per acre. One to five down logs per acre would be created by felling live trees with a chainsaw.

Monitoring would be done before and after treatment and compared to controls to determine if the theorized level of canopy cover and disturbance is correct for this species. .

### 2.3 Alternative 3: Treatment Constructing a Temporary skid road at Spores Creek

The actions in this alternative are the same as Alternative 2 except that a temporary skid road would be built at Spores Creek. The road would be built to access an additional 5 acres for treatment, which would connect the habitats of two aster populations (one population along the existing road and another uphill approximately 800'). This would create a larger habitat area for the aster to expand into, with a better potential for recruitment as there are two seed sources. This alternative would treat a total of 16 acres (see Figure 1).

The temporary skid road would be approximately 900' long. After use, the first 300'(approximately) of the skid road would be tilled and blocked above the existing road. The remainder of the road would not be tilled to limit the spread of false brome. The road would be seeded with native grass seed if needed to compete with the false brome.

Figure 1.

Site Name	Alt. 2	Alt. 3	
1. Lower 79 <sup>th</sup> street	3 acres	3 acres	T.18S, R.2W, Sec. 1
2.Papenfus upper	2 “	2 “	T.19S, R.2W, Sec.15
3. RFI #9	3 “	3 “	T.14S, R.2W, Sec. 28
4. Spores Creek	3 “	8 “	T.17S, R.2W, Sec. 5
Total acreage treated	11 acres	16 acres	

## 2.4 Design Features Common to All Action Alternatives

- Management activities would be altered according to RMP standards and guidelines and BLM policy if any cultural resources or Special Status Plants or Wildlife- including Threatened and Endangered, are found in or affected by project activities.
- **Seasonal Restrictions**- There will be no activities between March 1- July 15 for the RFI #9 and Papenfus project areas. These proposed project areas are within 65 yards of suitable spotted owl nesting habitat. These restrictions may be waived by a wildlife biologist if it is determined that nesting spotted owls would not be disturbed by proposed activities.
- **Coarse Woody Debris Requirement** - Retain all existing coarse woody debris (CWD) greater than or equal to 16 inches in diameter within the project areas on site. Minimize damage to existing coarse woody debris where possible. Existing CWD that presents a hazard to logging or other project operations may be relocated within the project area.
- **Snags** - Retain all existing snags greater than or equal to 16 inches in diameter that do not pose a safety hazard or an operational obstacle. Snags felled as danger trees would be retained on site as down logs.
- Burn piles would be small and widely scattered and would occupy less than 5 percent of the treated area.
- **All of the following requirements would apply for ground-based yarding operations** (79<sup>th</sup> Street, Alternative 2 and 3, Spores Creek Alternative 3 only).
- No activities, including yarding or pile burning would occur within 50 feet of springs.
- Designated skid trails would be preplanned and approved by the Authorized officer to occupy less than 10 percent of the harvest area.
- Trees would be felled to lead to skid trails.
- Yarding would be restricted to seasonally dry periods when soil moisture provides the most resistance to compaction, typically July 1<sup>st</sup> through October 15<sup>th</sup>.

### **3.0 AFFECTED ENVIRONMENT**

#### **3.1 Vegetation**

Prior to fire suppression, *Aster vialis* grew in the “high shade” of the open forests and in meadow edges on the fringes of the Willamette Valley. With fire suppression, the stands have typically filled in with an understory of younger trees, creating a closed canopy forest. The closed canopies have resulted in *Aster* populations that are small in number, small in size, not flowering and not producing seed. *Aster* populations where the canopy is more open are larger in number, larger in plant size, flowering and producing seed. It is believed that 50 to 75% is optimum canopy cover for *Aster*.

The proposed project areas are all located in the fringes of the Willamette Valley, in mixed hardwood/conifer forests near meadows. Stands are Douglas fir dominated with scattered hardwoods and cedars. All contain varying amounts and sizes of Oregon White Oak. All of the stands have scattered older (120+), larger remnant trees with open-grown characteristics such as large, low limbs and full crowns and a dense, closed canopy of younger trees. The younger trees are 40 to 80 years old. Prior to fire suppression these stands were probably open canopy mixed conifer and hardwood forests. The understory is a mix of ocean spray, poison oak, vine maple, hazel, salal and big-leaf maple. All of the sites are dry, south or west facing slopes. Current canopy closure is 85 to 100%.

##### **3.1.1 Weeds**

False brome (*Brachypodium sylvaticum*), blackberries and Scotch Broom are present at all the treatment sites in varying amounts. English Ivy is present at Lower 79<sup>th</sup> street.

##### **3.1.2 Special Status Plants**

*Aster vialis* is the only special status plant species present.

##### **3.1.3 Areas of Critical Environmental Concern (ACEC)**

RFI # 9 is part of the Coburg Hills Relict Forest Island ACEC. RFI #9 is 35 acres in size. The proposed action would treat approximately 3 acres containing *Aster vialis*.

This ACEC was established to protect remnant islands of old growth and mature forest. These ecosystems and communities are found in low elevation forests adjacent to the Willamette Valley. The relevant values for this ACEC are that the mature forest support “breeding wintering population of wildlife including at least eleven species of raptors and that this area is “part of the natural coniferous forest ecosystem in which many natural processes are occurring”.

The important values of this ACEC include the following: 1) it is a source of biotic diversity, consisting of unique forest characteristics (mature and old-growth forest) in the Coburg Hills; 2) it is an island of mature forest to provide refugia for raptors and late successional species (such as *Aster vialis*) that may later recolonize adjacent lands; 3) it provides “unique and exemplary raptor habitat.”

Fire suppression has allowed a dense understory of young trees to grow up under the old-growth trees, creating a dense, closed canopy forest. Historically, this stand was open with scattered large trees and a network of meadows. RFI# 9 was salvaged logged sometime prior to 1964. There is a network of old skid roads through the stand. The compaction of the old skid roads and the natural meadows kept areas open enough to retain an *Aster vialis* population.

### **3.2 Soils**

All sites occur in the xeric moisture zone; located below 1,000 feet elevation with 40 to 60 inches of rain per year, falling primarily in the winter months. All sites seem to be in landscape positions where different soil types meet and mix. The treatment areas are similar in that they contain some Ritner soils. Ritner silty clay loam is moderately deep (32 inches average) with a high amount of coarse fragments on the surface and throughout the profile, both cobbles and gravel (35 to 65 percent). Depth and stoniness are both quite variable. The organic layer is thin and discontinuous. Clay content is high in the subsoil, typically over 50%. The heavy subsoil makes for moderately slow internal drainage when soils are wet, but creates very droughty conditions when soils dry. Ritner soils have intermediate productivity and low plant available water.

Witzel cobbly loam is the most prevalent soil at RFI #9. This soil is shallow, usually less than 15 inches deep with about 60 percent coarse fragments. Witzel soils are very prone to erosion due to low amount of organic cover and limited depth. Productivity and plant available water are both very low. The surface soil is dark, indicative of a grass dominated plant community over time. This meadow has previously been withdrawn from the District's commercial timber base because it is poorly suited to the production of Douglas-fir.

Soils that occur in lesser amounts include Bellpine silty clay loam at Spores Ck. and Dixonville silty clay loam at Lower 79<sup>th</sup> Street (Lane County Soil Survey, 1987).

### **3.3 Hydrology**

Papenfus is located on a minor ridge between two intermittent streams. Two springs occur just above the road at Spores Creek. No other water features were identified.

### **3.4 Wildlife**

#### **3.4.1 Bald Eagle (Threatened)**

Suitable nesting habitat for bald eagles is mature forest within one mile of a lake, river or major tributary. There is no suitable nesting habitat for bald eagles within or adjacent to the project areas. Effects to this species will not be analyzed in this document.

#### **3.4.2 Northern Spotted Owl (Threatened)**

Suitable nesting habitat for this species is mature forest (generally greater than 80 years old) with high canopy cover, an open understory, large down logs and large snags. There is no suitable habitat within the proposed project area. There is suitable habitat adjacent to the Papenfus and RFI #9 project areas.

Dispersal habitat for spotted owls is generally defined as stands ranging from 40 to 79 years of age. Juvenile spotted owls use dispersal habitat to roost and forage in as they disperse from their natal areas. Adults forage in dispersal habitat to support themselves and their young. There is a total of approximately 16 acres of dispersal habitat across all the proposed project areas.

## **4.0 ENVIRONMENTAL CONSEQUENCES**

This incorporates the analysis of cumulative effects in the *The Eugene District Proposed RMP/EIS, November, 1994* (Chapter 4), and the *Supplemental Environmental Impact Statement Amending the Survey and Manage, Protection Buffer, and Other Mitigating Measures Standards and Guidelines, 2001*. The following analysis has an effects section that supplements those analyzed in the above documents, and provides site-specific information and analysis particular to the alternatives considered here.

### **4.1 Alternative 1: No Action**

#### **4.1.1 Issue 1: How would road building activities affect soils and non-native plants?**

As there would be no road building, there would be no effects to soils. Weeds could be treated under an existing environmental document.

#### **4.1.2 Issue 2: How would the action alternatives affect *Aster vialis* habitat?**

Fire suppression has altered the natural processes at these sites, creating dense stands. *Aster vialis* needs more open conditions than these stands provide. Aster populations would continue to shrink as no new plants would be added from seed and existing plants would get shaded out. Over time these populations would be lost. These are four of 16 Aster populations present in the Upper Willamette Resource Area. As sites are lost, the potential for the need to list the species would increase.

The opportunity to test the *Aster vialis* Management Recommendations would be lost. Future habitat improvement projects for aster would not be based on tested methods.

### **4.2 Alternative 2: Treatment from Existing Roads**

#### **4.2.1 Issue 1: How would road building affect soils and non-native plants?**

An existing skid trail would be refurbished for use at Lower 79<sup>th</sup> street. The road bed is still evident and only small trees grow in the old roadbed. Very little additional compaction or excavation would result beyond what currently exists.

No long term soil productivity losses are anticipated. No cumulative effects would occur since treated acreage is small and the four sites are in different watersheds.

Road building would disturb soils creating seed bed for weeds. False brome, blackberries, Scotch broom and English Ivy are all spread and encouraged by road building and logging. Pulling and mulching weeds prior to the proposed action would reduce the weeds. There would be fewer to spread. Treatment after activity would prevent the Aster from being overgrown by weeds.

#### **4.2.2 Issue 2: How would the action alternatives affect *Aster vialis* habitat?**

Mixed oak-conifer forest is uncommon on the Eugene district. Due to fire suppression, these sites are slowly being lost as Aster habitat as they fill in with conifers. Thinning the overstory, would maintain oaks, *Aster vialis* and other species that grow in open stands resembling the historic conditions. The management prescription is designed to mimic historical habitat conditions for *Aster vialis*. Fire suppression has altered the natural processes at these sites, creating dense stands. Opening the stands to 50-75% canopy cover and creating forest gaps would create open habitat resembling historic conditions for Aster. Improving the habitat would create *Aster vialis* populations that are flowering, taller and increasing by seed. Some increase in brush is expected but the 50- 75% canopy cover would limit growth and not allow brush to dominate the sites after treatment.

Testing the *Aster vialis* Management Recommendations would allow future habitat improvement projects for aster to be based on tested methods confirmed by an appropriate study design. This design (treatment and controls spread across a large area) allows inferences to be made about treatment effect that could be applied across the entire range of *Aster vialis*, guiding management of the species as a whole.

### **4.3 Alternative 3: Treatment Constructing a Temporary Native Surface Road at Spores Creek**

#### **4.3.1 Issue 1: How would road building activities affect soils and non-native plants?**

Building a 900 foot skid road to access and treat around the second group of Aster plants at Spores Creek would displace and compact soils. After harvest, the lower segment (about 300 feet) would be tilled to restore infiltration and prevent vehicle access. The remainder of the road would not be treated as soils are too rocky to be tilled. Waterbars would be constructed to minimize on site erosion. After treatment, compaction would persist for a few decades and soil productivity would be reduced on 4 percent of the area.

Tilling could encourage the spread of false brome. False brome would be removed by hand prior to the action to limit spread. However, some seed could remain in the soil. The route of the road avoids patches of false brome to limit spread. Maintenance weeding would be done after the action to prevent weeds from taking over the project area. If needed to reduce the spread of false brome, the tilled roadbed would be seeded with native grass.

#### **4.3.2 Issue 2: What would be the effect of the proposed action on aster vialis habitat?**

Same as Alternative 2 except that building the 900' skid road would access an additional 4 acres for treatment. This would create additional open habitat for the Aster populations. Treating the larger area would connect the two aster populations present at Spores Creek by suitable habitat. This would create a larger habitat area for the Aster to expand into, with a better potential for recruitment as there would be two seed sources.

### **5.0 OTHER ENVIRONMENTAL EFFECTS COMMON TO ALL ACTION ALTERNATIVES**

#### **5.1 Unaffected Resources**

The following are either not present or would not be affected by any of the alternatives: cultural resources, prime or unique farm lands, fold plains, solid or hazardous wastes, Wild and Scenic Rivers or wilderness

#### **5.2 Air Quality**

Smoke emissions from the burning of slash piles will be of short duration, however, the final decision to burn will be made by Oregon Department of Forestry (ODF) through daily Smoke Management Instructions. Pile burning will occur between November 1 and January 1 when the most favorable emission dispersion conditions are possible. Pile burning may occur over several days. It is not anticipated that pile burning will exceed the National Ambient Air Quality Standards (NAAQS) or the State Implementation Plan (SIP) for air quality.

#### **5.3 Threatened and Endangered Species**

##### Northern spotted owl

Approximately 8 acres of dispersal habitat would be degraded under Alternative 2 and 16 acres would be degraded under Alternative 3. Canopy closure would be decreased, but the habitat would still function as dispersal habitat immediately after treatment. Long term, the creation of snags and down logs would improve this habitat to some degree, but the proposed treatment areas are so small that effects to owls would be minimal.

#### **5.4 Area of Critical Environmental Concern**

The old-growth values found in RFI#9 have degraded through time as the understory has filled in with a dense, second-growth stand instead of the open stand present historically. As the stand filled in, its value as a refugia for Aster and other species of open, older stands diminished.

The proposed treatment would create open stand conditions resembling the historic conditions, restoring old-growth characteristics. Its value as refugia for Aster and other late successional would return. The relevant and important values of the ACEC would be maintained in the treatment area.

## **5.5 American Indian Rights**

No impacts on American Indian social, economic, or subsistence rights are anticipated. No impacts are anticipated on the American Indian Religious Freedom Act. Management action information was sent to the Confederated Tribes of the Grand Ronde, and Confederated Tribes of the Siletz.

## **5.6 Environmental Justice**

To comply with Executive Order 12898 of February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the Bureau of Land Management, Eugene District, will ensure that the public, including minority communities and low income communities, have adequate access to public information relating to human health or environmental planning, regulations, and enforcement as required by law.

The District has not identified any environmental effects, including human health, economic and social effects of Federal actions, including effects on minority populations, low-income populations, and Native American tribes, in this analysis.

## **6.0 LIST OF AGENCIES AND PERSONS CONSULTED**

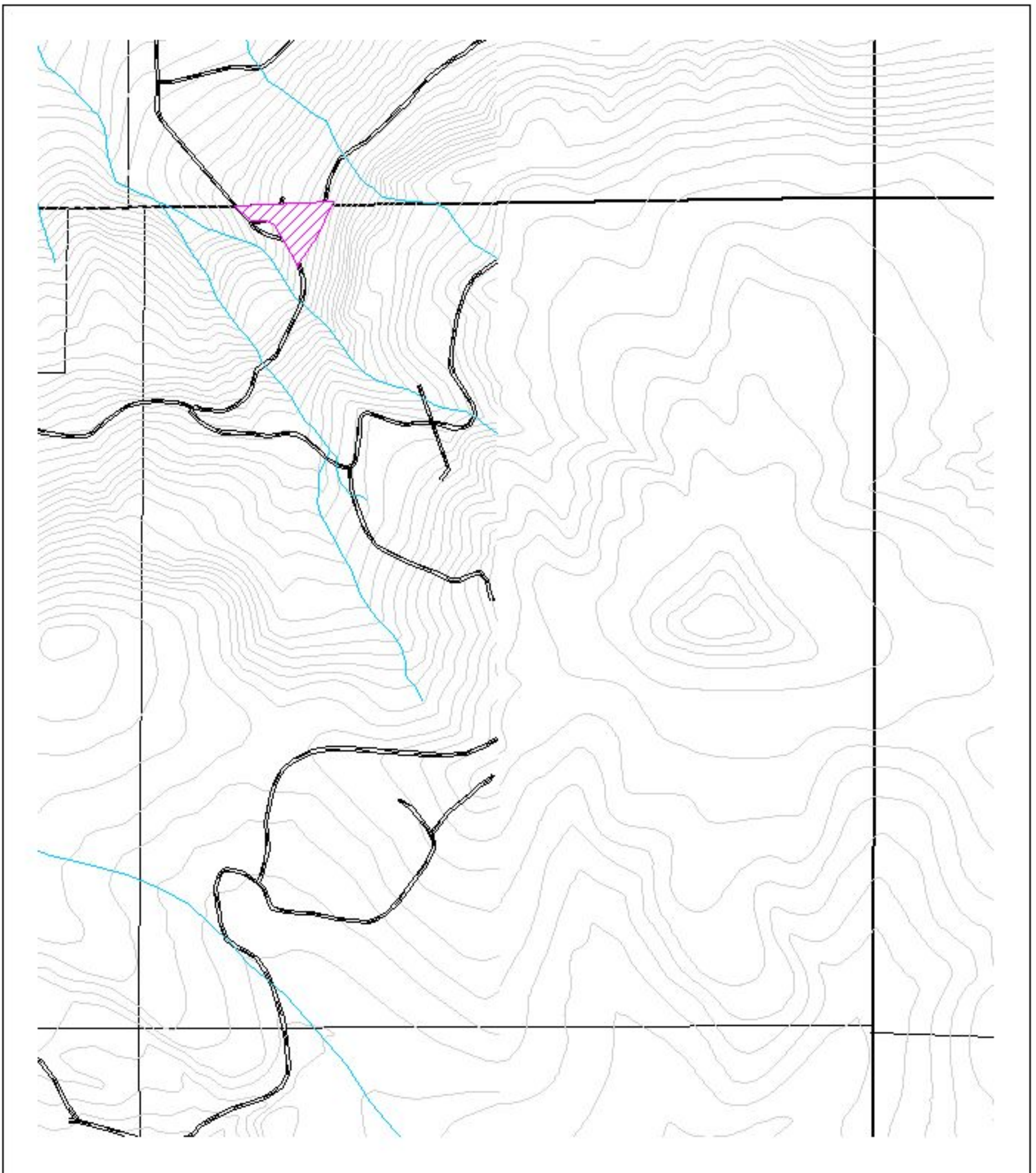
This Environmental Analysis is being mailed to the following members of the public or organizations that have requested to be on the mailing list:

John Bianco  
Oregon DEQ  
Jim Goodpasture  
Pam Hewitt  
Charles & Reida Kimmel  
Lane County Land Management  
Carol Logan, Kalapooya Sacred Circle Alliance  
Oregon Dept of Fish & Wildlife  
Oregon Dept of Forestry  
Oregon Natural Resources Council  
The Pacific Rivers Council  
John Poynter  
Leroy Pruitt  
Neal Miller

Roseburg Forest Products Co.  
Peter Saraceno  
Sierra Club - Many Rivers Group  
Swanson Group  
Craig Tupper  
Jan Wroncy  
Kris and John Ward  
Robert P Davison  
Tom Stave, U of O Library  
John Muir Project  
James Johnston  
Molly Widmer  
David Simone  
Bart Pratt  
Rich Wright

## 7.0 LIST OF PREPARERS

	Title	Name
Paula Larson	Wildlife Biologist	Wildlife
Cheshire Mayrsohn	Botanist	Botany
Rudy Wiedenbeck	Soil Scientist	Soils
Fred Kallien	Fuels Specialist	Fuels
Christie Hardenbrook	Environmental Specialist	NEPA
Roger Wilson	Forester	Forestry



3 acres

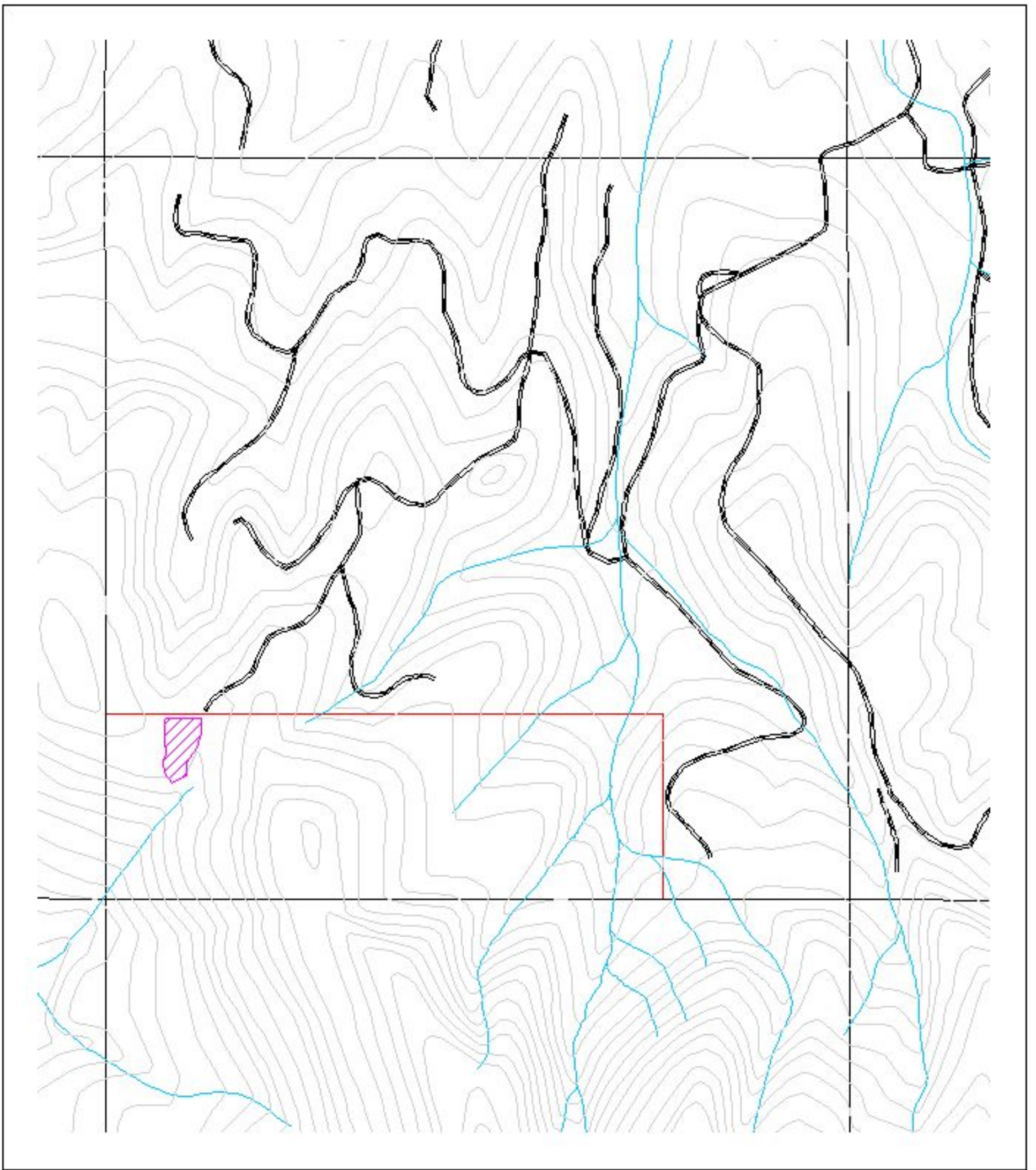
1:12,000  
Treatment area of 79th st.  
Streams  
Roads  
80' contours  
40' contours  
Sections  
Township

T.18s R 2w sec 1  
Lower 79th street

500 0 500 1000 Feet

April 21 2004





1:12,000

2 acres

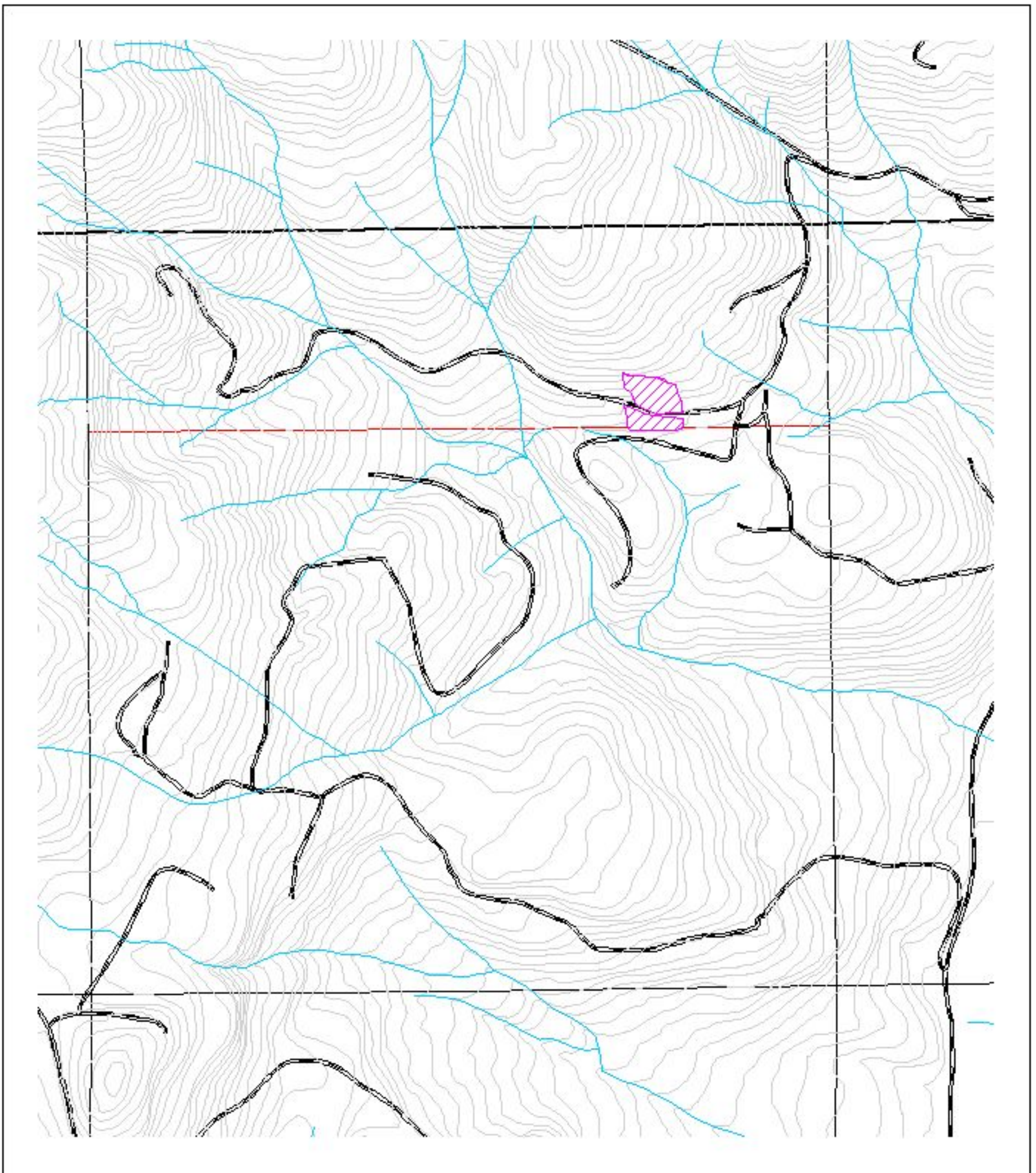
T.19s, R.2w, sec. 15  
Papenfus Road

■ treatment area- Papenfus  
contours  
Streams  
Roads  
Sections  
■ property line

500 0 500 1000 Feet

April 21 2004





1:12,000

T.17s, R.2w, sec. 5  
Spores Creek  
Alternative 2

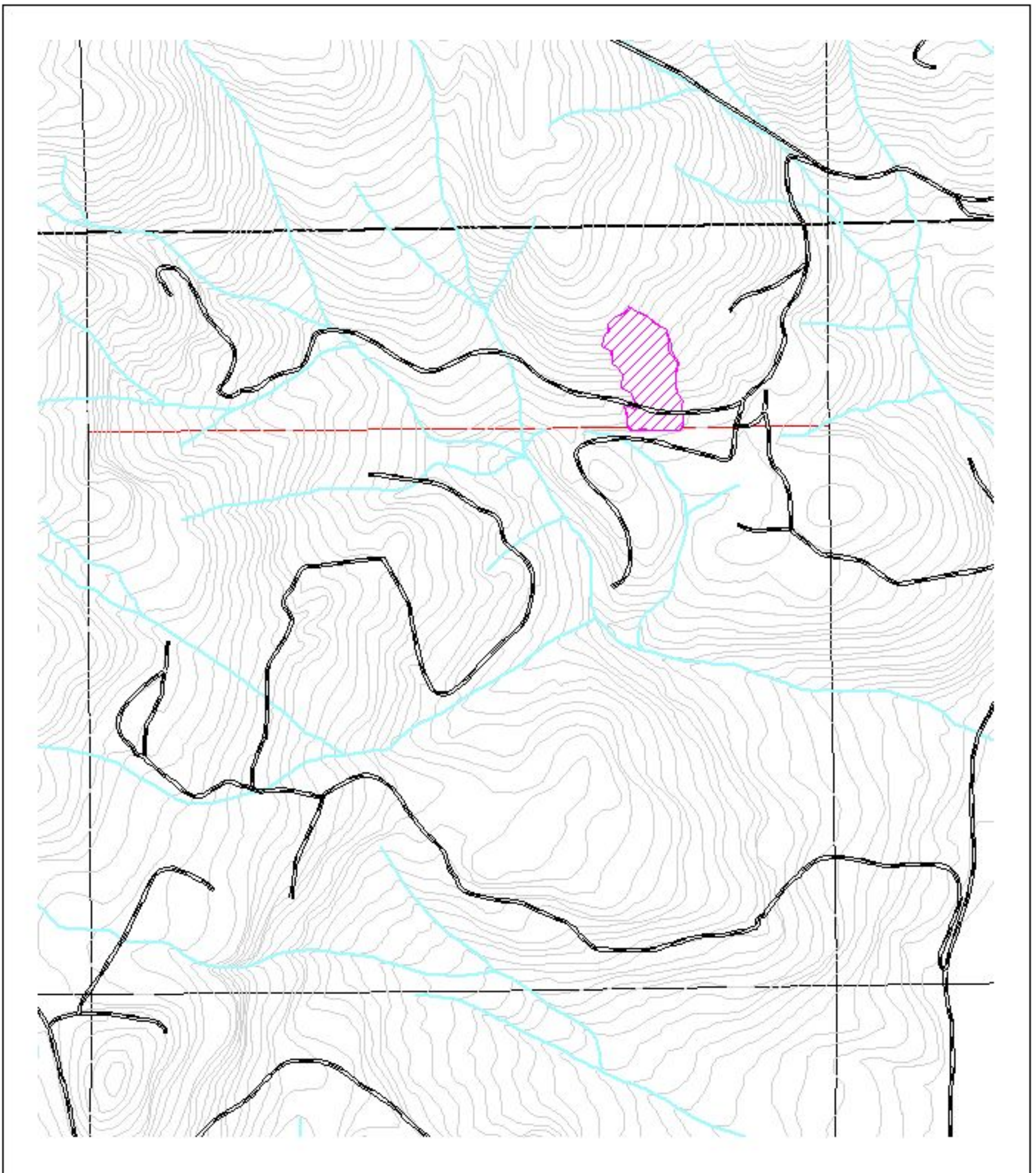
3 acres

■ Treatment area - Spores Crk. Alt 2  
■ Stream  
■ Contour  
■ Road  
■ Section  
■ Property line  
■ Township

500 0 500 1000 Feet

April 21 2004





1:12,000

T.17s, R.2w, sec. 5  
Spores Creek  
Alternative 3

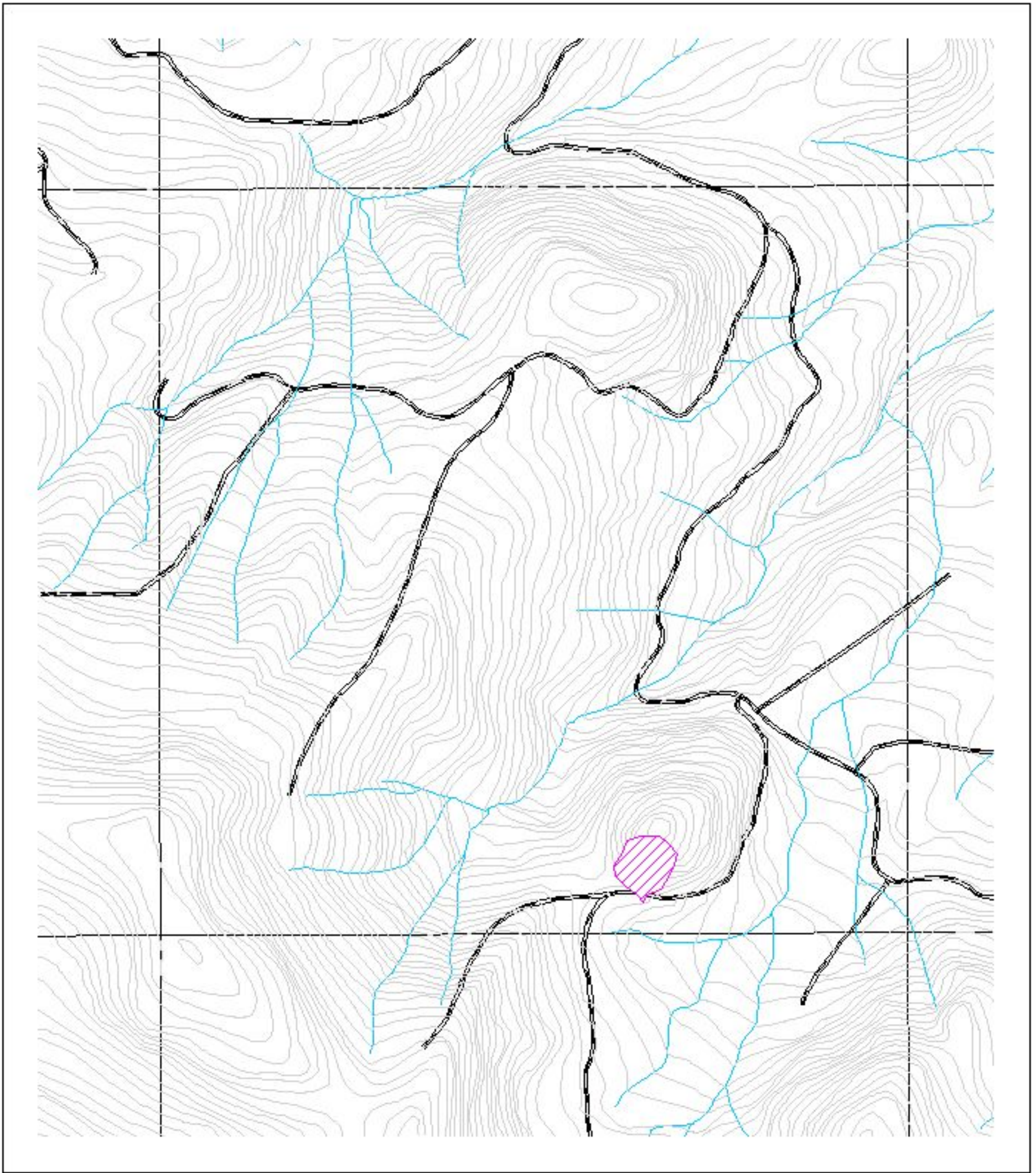
8 acres

- Treatment area of Spores Creek
- Streambed
- Contour
- Section
- property line
- Township

500 0 500 1000 Feet

April 21 2004





1:12,000

3 acres

T.14s, R.2w, sec. 28  
RFI # 9

- Treatment area of RFI #9
- Contour
- Streams
- Roads
- Sections
- Township

500 0 500 1000 Feet

April 21 2004



UNITED STATES DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT  
EUGENE DISTRICT OFFICE

Finding of No Significant Impact  
for  
*Aster vialis* Habitat Enhancement  
Environmental Assessment No. 090 EA 04-12

Determination:

On the basis of the information contained in the Environmental Assessment, and all other information available to me, it is my determination that implementation of the proposed action or alternatives will not have significant environmental impacts not already addressed in the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (April 1994) and the *Eugene District Record of Decision and Resource Management Plan* (June 1995), as amended by the *Record of Decision for Amendments to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines*, January 2001, the *Record of Decision to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* (March 2004), and the *Record of Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy* (March 2004), with which this EA is in conformance, and does not, in and of itself, constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

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Field Manager, Upper Willamette Resource Area

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Date